

**Work Order ID: 54963**

Page 1

January 5, 2010 11:19:13 AM

Item ID: D3562-041

Accept



Setup Start



Revision ID:

Item Name: Step Assembly, LH

Stop



Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date: 10-1-05

Tooling:

Date:

Run Start



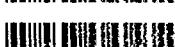
QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3562	Rev E
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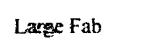
100



Large Fab

0.00

Large Fab



Memo

0.00

I-Cut D2622 extrusion as per Dwg D3562-02-Deburr and bevel ends for welding

10-01-13

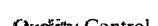
110



QC5- Inspect part completeness to step on W/O

0.00

QC

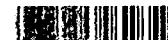


Memo

0.00

Pb&gt;

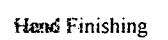
120



HandFinish

0.00

Hand Finishing



Memo

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3562-041 PAR #: \_\_\_\_\_ Fault Category: longe fls NCR: Yes No DQA: J Date: 10-03-01  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR: 54963		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/1/12	#100	QH x1 step Found in back with <del>multiple</del> dents along the top + side. RC. Stages + Trans Part.	<u>J</u> <i>assume</i>	Scrap entire length Re cut new step	<u>J</u> 10-01-13	<u>S</u> <i>ok to go</i>	<u>J</u> 10/14/12	<u>S</u> 10/1/12
			<u>L</u>					

NOTE: Date & initial all entries

# Work Order ID 54963



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Accept



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Item ID: D3562-041

Revision ID:

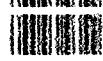
Item Name: Step Assembly, LH

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Req'd Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

QC3- inspect Part Finish

0.00

BAD

(1)

QC

Memo

0.00

10-01-15

Quality Control

140

Small Fab

0.00

Small Fab

Memo

0.00

Small Fab

1- Transfer drill Rivet holes as per dwg D3562. 2-Touch-up rivet holes with alodine as per dwg d3562. 3-Rivet legs using Magnabond as per dwg D3562. \*\*\*\*\*Ensure to wipe off any excess magnabond \*\*\*\*\* A/R Magnabond 6398 Batch: m12417

10-01-15

150

QC5- Inspect part completeness to step on W/O

0.00

2010-01-18

QC

Memo

0.00

Quality Control

41  
44

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries

**Work Order ID 54963**

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January 5, 2010 11:19:13 AM

Accept



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Item ID: D3562-041

Revision ID:

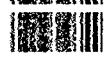
Item Name: Step Assembly, LH

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160



Large Fab

0.00

Large Fab

Memo

0.00

Large Fab

1-Weld end caps as per Dwg D3562& QSI 004. Inspect for foreign objects as per QSI 024. A/R Aluminum Rod M41311 U2-Grind end cap welds flush as per Dwg D3562

PL 10/01/18

170



QC9- Inspect visual per QSI004- Fusion Welds

0.00

QC

Memo

0.00

Quality Control

①

BE 10/01/18

180



QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

28 10/01/18

④

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190



HandFinish

Chemical Conversion Coat per QSI005 4.1

0.00

=J4

10-02-05

(X) O

Hand Finishing

200



Powdercoat

White Gloss(Ref.4.3.5.1) per QSI005 4.3-Alum

0.00

M1113170

LH

Powder Coating

Memo

0.00

=J4

10-01-08

(X) O

210



HandFinish

Pressure Wash per QSI005 4.3

0.00

Wing Walk Batch M113462

0.00

BK 10-02-9

(1) lot of

Hand Finishing

10/02/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

220



QC

Quality Control

QC3- Inspect Part Finish

0.00

230



Packaging

Packaging

Pick Kit

0.00

240



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Picklist Print**

January 5, 2010 11:19:17 AM

Page 1

Work Order ID: 54963



Parent Item: D3562-041



Parent Item Name: Step Assembly, LH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Pin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Retaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2734



Manufactured

No

100

Each

25.0000

2.0000



Step End Plate

*SL 10-01-15*

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

ST

25

43535

2

48110

23

D2622-120C



Manufactured

No

140

Each

84.8200

1.0000



Step Extrusion

*SL 10-01-18*

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

WA

84.82

48612

3.12

52026

81.7

D3560-041



Manufactured

No

140

Each

2.0000

1.0000



Arm Weldment

*SL 10-01-15*

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

ST

2

47863

2

*SL 10-01-15*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries

**Picklist Print**

January 5, 2010 11:19:17 AM

Page 2

Work Order ID: 54963



Parent Item: D3562-041



Parent Item Name: Step Assembly, LH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D3560-043



Manufactured

No

140

Each

1.0000

1.0000



FL 10.01.15

Arm Weldment

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

ST

1

47865

1

MS20600-AD4W5



Purchased

No

160

Each

852.0000

32.0000



FL 10.01.18

Blind Rivet

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

ST

852

110523

212

111477

640

32

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

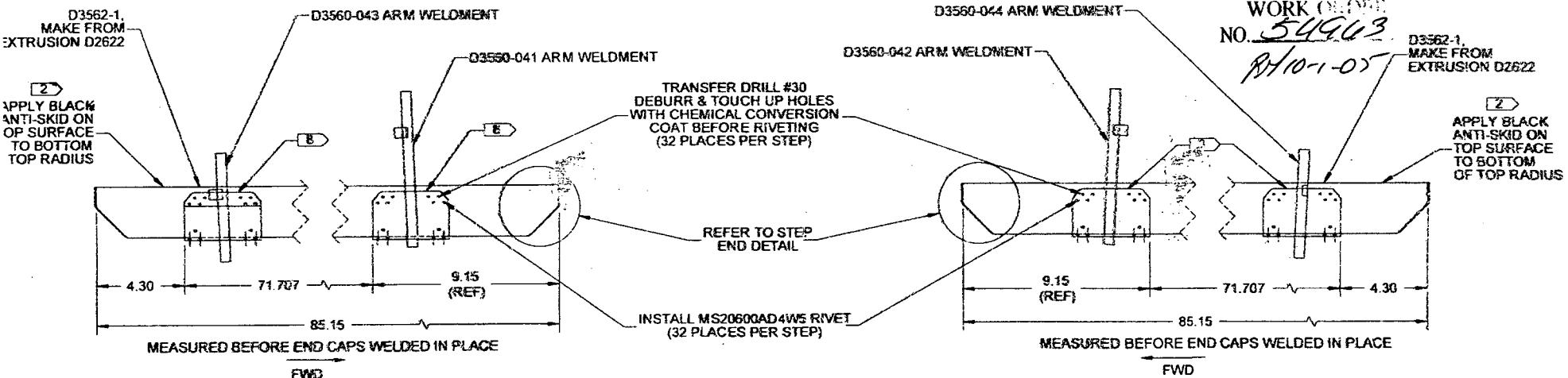
NOTE: Date & initial all entries

WITHOUT NOTICE

WORK ON LINE

NO. 54963

REV 10-1-07

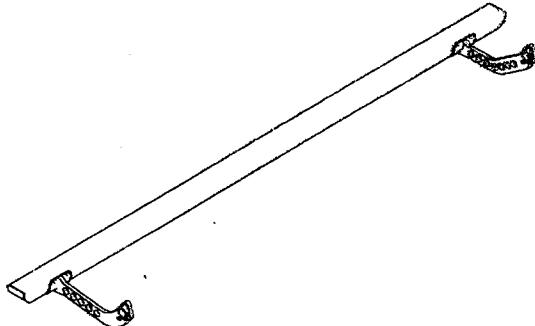
D3562-1,  
MAKE FROM  
EXTRUSION D2622D  
APPLY BLACK  
ANTI-SKID ON  
TOP SURFACE  
TO BOTTOM  
OF TOP RADIUS

MEASURED BEFORE END CAPS WELDED IN PLACE

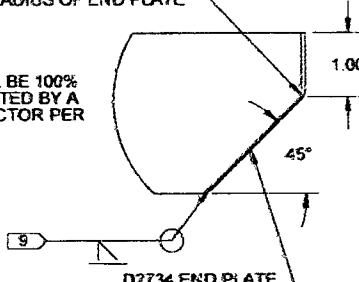
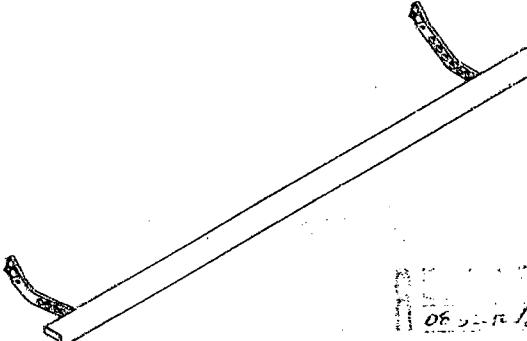
FWD

MEASURED BEFORE END CAPS WELDED IN PLACE

FWD



D3562-041 LH STEP ASSEMBLY

ROUND CORNER OF EXTRUSION TO  
MATCH BEND RADIUS OF END PLATENOTE: ALL WELDS SHALL BE 100%  
VISUALLY INSPECTED BY A  
QUALIFIED INSPECTOR PER  
DART QSI 004TYPICAL STEP END DETAIL  
SCALE 1:2

D3562-042 RH STEP ASSEMBLY

## NOTES:

- 1) MATERIAL: N/A
- 2) FINISH:
  - i) CHEMICAL CONVERSION COAT STEP EXTRUSION PER DART QSI 005 4.1 BEFORE ASSEMBLY
  - ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6) OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
  - iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 6.79 lbs
- 8) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.
- 9) WELDING: PER DART QSI 004

QTY 041	QTY 042	P/N	DESCRIPTION
X	X	D3562-041	LH STEP ASSEMBLY
1	1	D3562-042	RH STEP ASSEMBLY
		D3560-041	ARM WELDMENT
		D3560-042	ARM WELDMENT
1	1	D3560-043	ARM WELDMENT
	1	D3560-044	ARM WELDMENT
32	32	MS20600AD4W5	RIVET
2	2	D2734	END PLATE

E	ADD QTY (2) TO D2734 END PLATE ON D3562-042	PH	08.01.11
C	REMOVE D2408 SPACER NOTE; REDRAWN IN SOLIDWORKS	SC	07.11.16
C	NOW MAGNOBOND, ADD D2808, REMOVE 4 RIVETS	CP	07.06.19
B	ARMS NOW RIVETED TO STEP	CP	07.01.15
A	NEW ISSUE	CP	06.09.26
REV.	DESCRIPTION	BY	DATE
DESIGN	9P	DART AEROSPACE LTD	
DRAWN	EE	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JK	DRAWING NO.	REV. E
MFG APPR.	M	D3562	SHEET 1 OF 1
APPROVED	M	TITLE	SCALE
DE APPR.	M	STEP ASSEMBLY	1:5
DATE	08.01.11	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. IT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS NOT TO BE USED FOR ANY OTHER PURPOSE OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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